

Date: Tuesday, 9/4/2007 11:30:25 AM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : VERTICAL TUBE
Job Number : 34420	
Estimate Number : 12312	
P.O. Number : <i>N/A</i>	Part Number : D34735
This Issue : 9/4/2007 S.O. No. : <i>N/A</i>	Drawing Number : D3473 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : SMALL /MED FAB	Drawing Revision : B
Previous Run : 28807	Material : <i>N/A</i>
Written By : <i>[Signature]</i>	Due Date : 10/4/2007 Qty: 6 Um: Each
Checked & Approved By : <i>[Signature]</i>	
Comment : Est Rev: A New Issue 06-03-02 JLM	
Est Rev: B As per Rev B 06-05-24 JLM	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M304S26GA	304/316 0.018 SHEET
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Comment: Qty.: 0.1616 sf(s)/Unit Total : 0.9696 sf(s)

304/316 0.018 SHEET

Batch: *M105 490**SAD 07/09/04*

2.0	WATER JET	FLOW WATER JET
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Comment: FLOW WATER JET

Cut as per Dwg D3473

Dwg Rev: *B*Prog Rev: *B**SAD 07/09/04 E*

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

*SAD 07/09/04**6*

4.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

*En 07/09/05 (6) counts*

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL &amp; MEDIUM FAB RESOURCE 1

1-Deburr if necessary.

2-Roll &amp; Bead as per Dwg D3473

3-Spot weld as per Dwg D3473

*mf 07-10-16 (6)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 9/4/2007 11:30:25 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: VERTICAL TUBE

Job Number: 34420

Part Number: D34735

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC11

VISUAL INSPECTION OF SPOT WELDING



Comment: VISUAL INSPECTION OF SPOT WELDING

SB 07/10/16 (6)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 07/10/16 (6)

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock  
Location: GA

SB 07/10/16 (6)

9.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

SB 07/10/17 (6)

Job Completion



LU 07/10/17

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

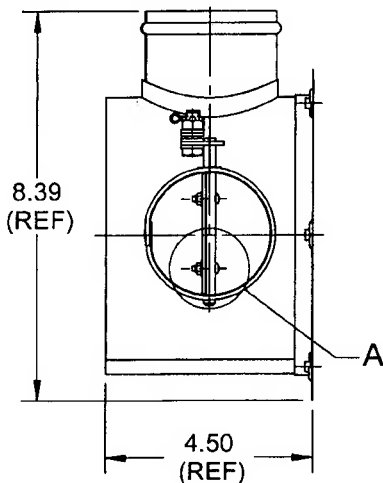
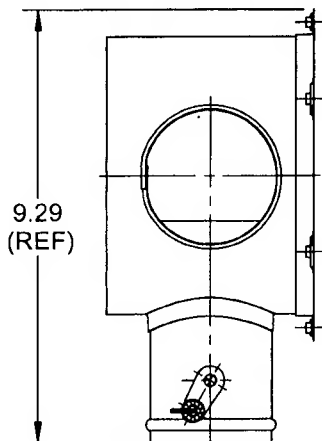




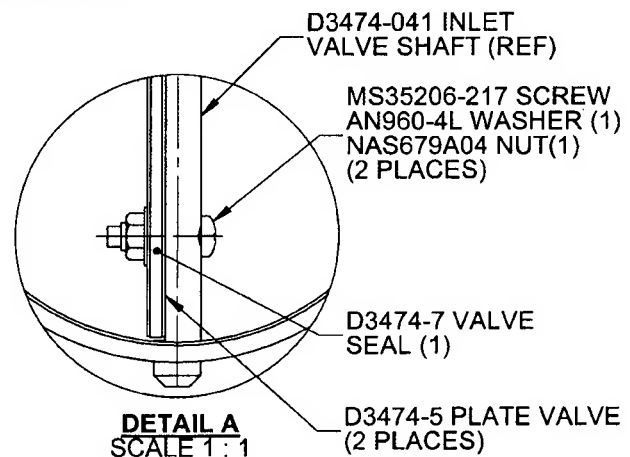
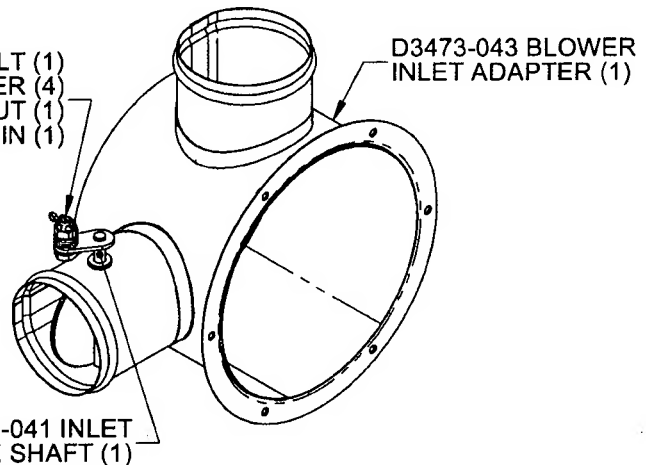


DESIGN 13	DRAWN BY 13	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. <b>D3473</b>	REV. B SHEET 1 OF 7
DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4
A	06.02.07	NEW ISSUE	
B	06.05.16	D3473-5F/-7F: 9.750 & 8.810 WERE 9.60 & 8.60	

RELEASED  
06-05-16 H



D3470-9 BOLT (1)  
AN960-416 WASHER (4)  
AN310-4 NUT (1)  
MS24665-153 COTTER PIN (1)



### **D3473-041 BLOWER INLET ADAPTER**

#### **NOTES:**

- 1) IDENTIFY WITH DART P/N D3473-041 USING FINE POINT PERMANENT INK MARKER
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-041	BLOWER INLET ADAPTER
1	D3470-9	BOLT
1	D3471-043	BLOWER INLET WELDMENT
1	D3474-041	INLET VALVE SHAFT
2	D3474-5	BUTTERFLY VALVE
1	D3474-7	BUTTERFLY VALVE SEAL
1	AN310-4	NUT
2	AN960-4L	WASHER
4	AN960-416	WASHER
1	MS24665-153	COTTER PIN
2	MS35206-217	SCREW
2	NAS679-A04	NUT

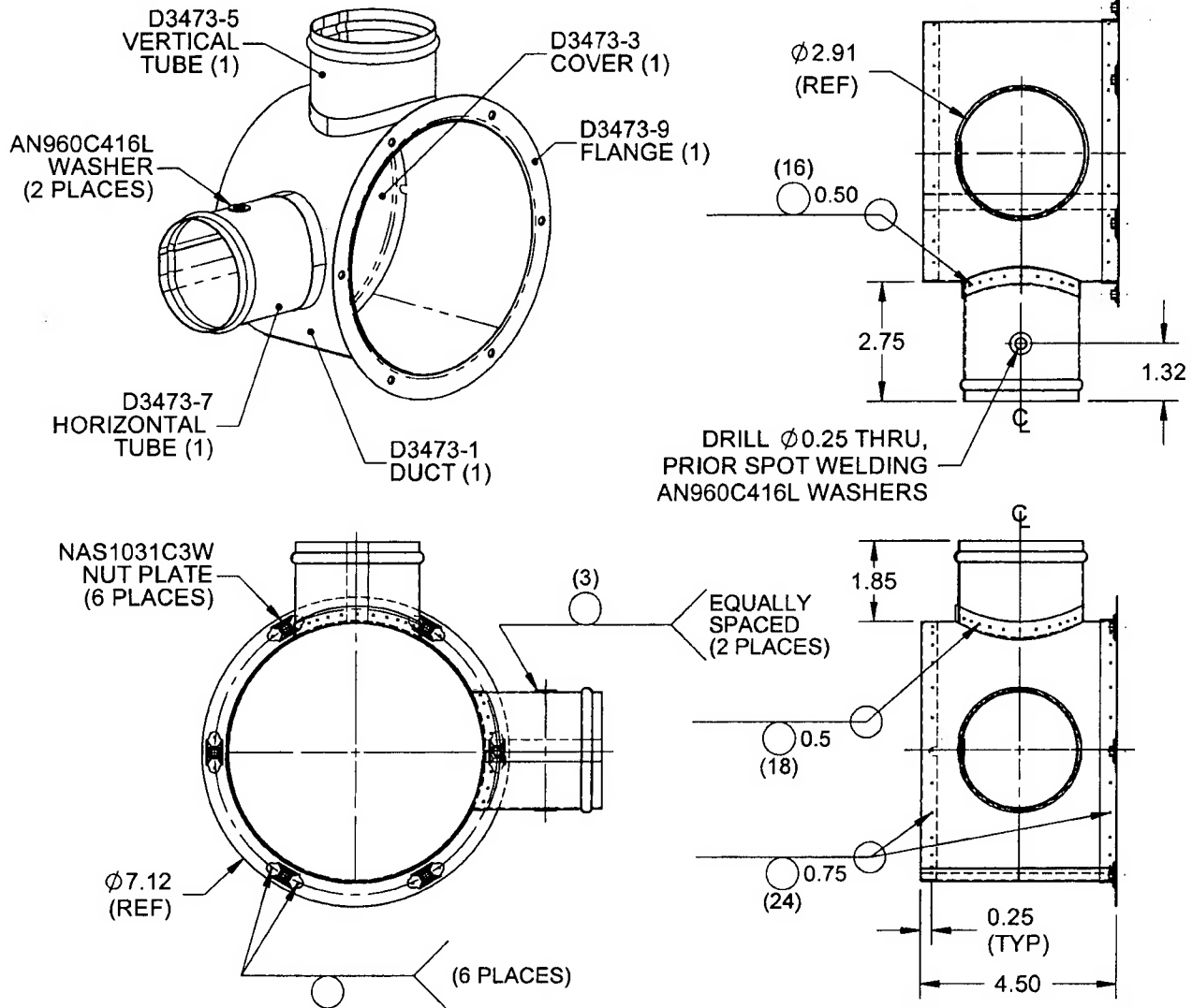
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DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	
		SCALE 1:4	

**RELEASED**  
06.05.16**D3473-043 BLOWER INLET WELDMENT****NOTES:**

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-043	BLOWER INLET WELDMENT
1	D3473-1	DUCT
1	D3473-3	COVER
1	D3473-5	VERTICAL TUBE
1	D3473-7	HORIZONTAL TUBE
1	D3473-9	FLANGE
2	AN960C416L	WASHER
6	NAS1031C3W	NUT PLATE

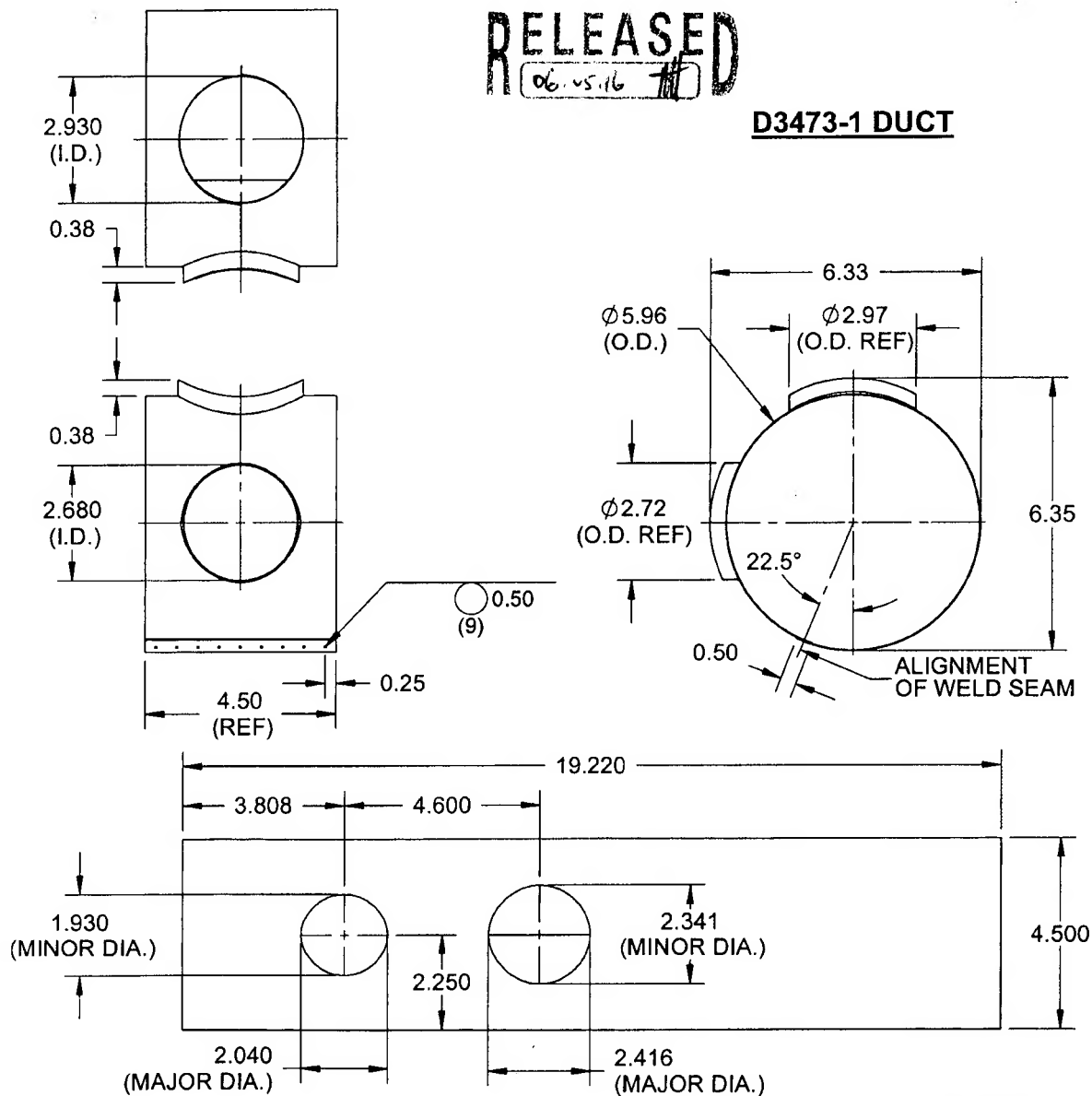
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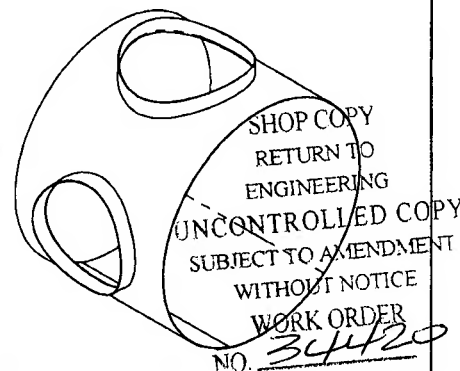


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DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4

**RELEASED**  
*[Stamp]***D3473-1 DUCT****D3473-1F DUCT FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED)  
2B FINISH 26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010



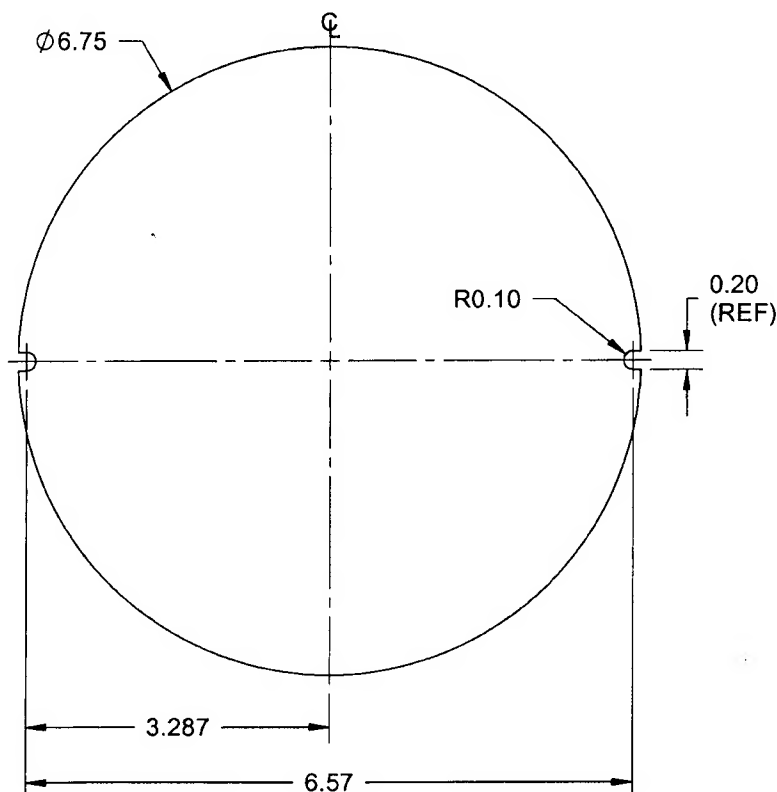
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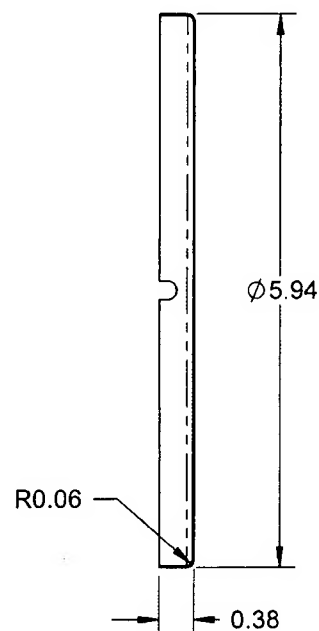


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DATE 06.05.16	TITLE BLOWER INLET ADAPTER		SCALE 1:2

RELEASED  
06-05-16 H



**D3473-3F COVER FLAT PATTERN**



**D3473-3 COVER**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) PART IS SYMMETRICAL ABOUT CENTERLINE
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

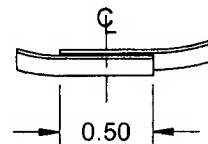
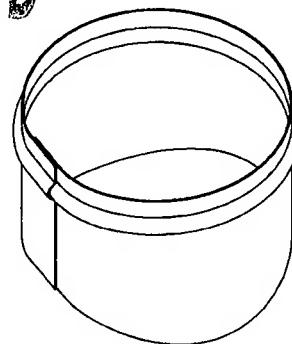
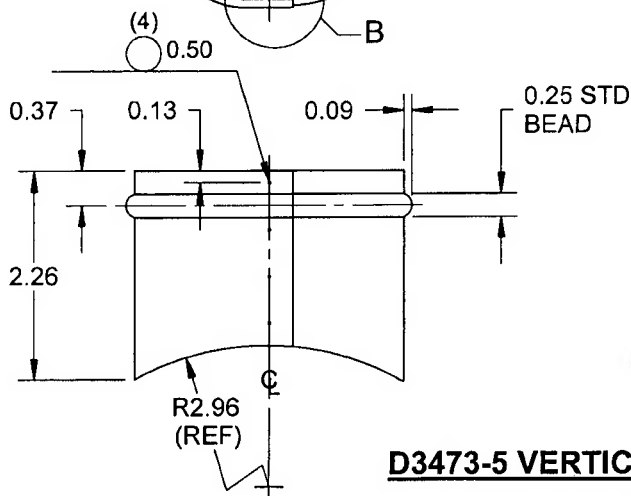
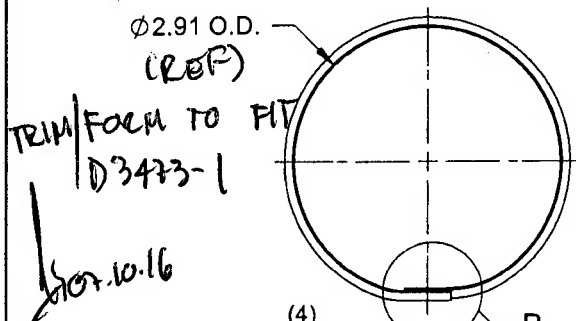
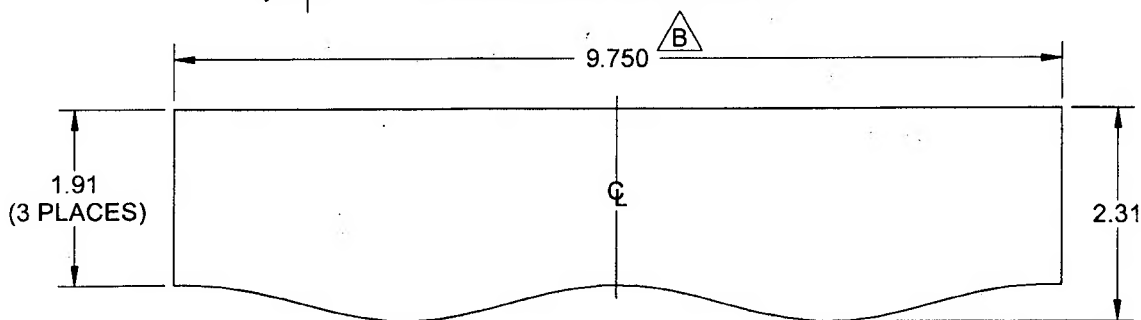
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DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:2

**RELEASED**  
*[Stamp]***DETAIL B**  
SCALE 1:1**D3473-5 VERTICAL TUBE****D3473-5F VERTICAL TUBE FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

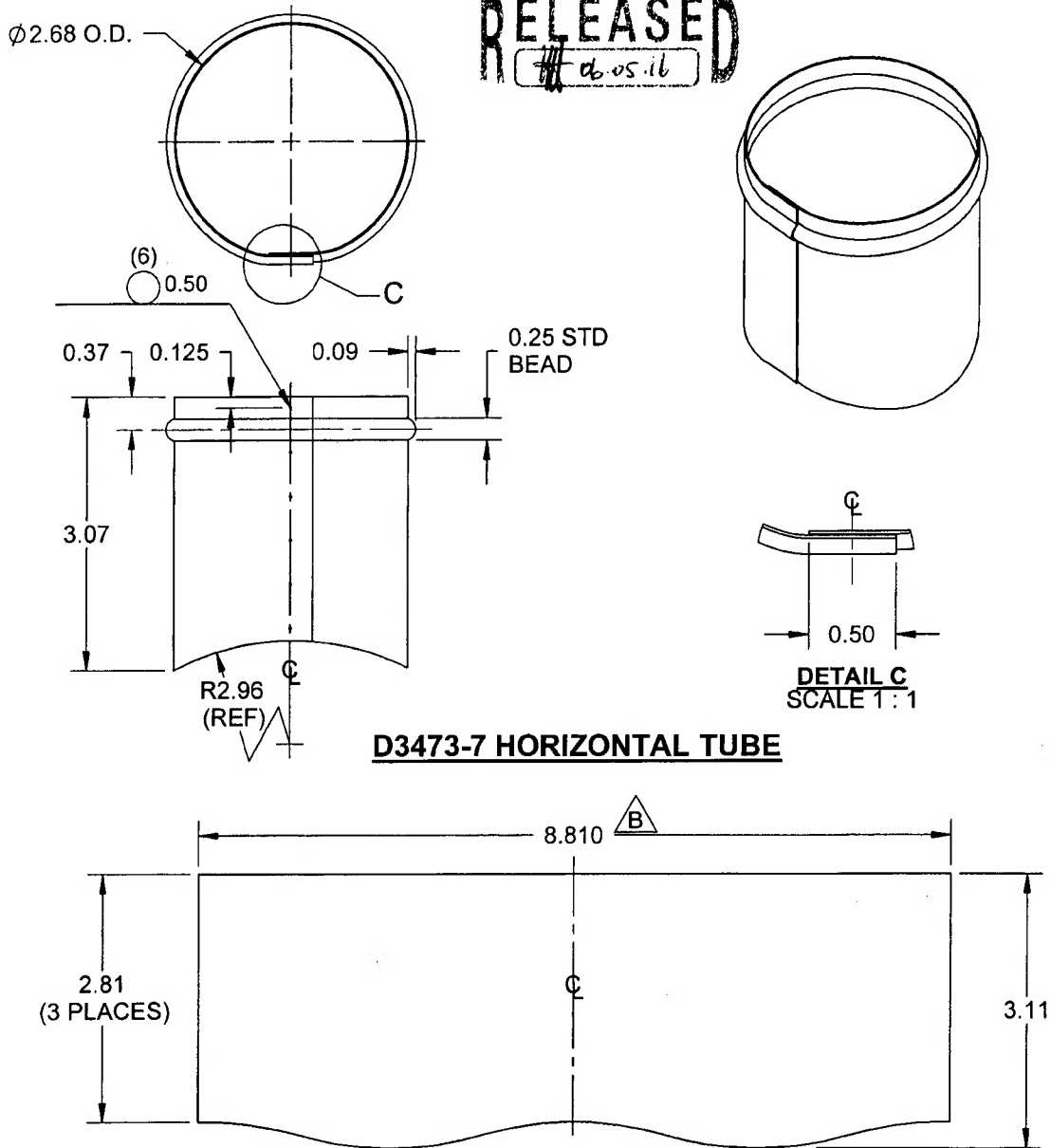
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DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:2

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

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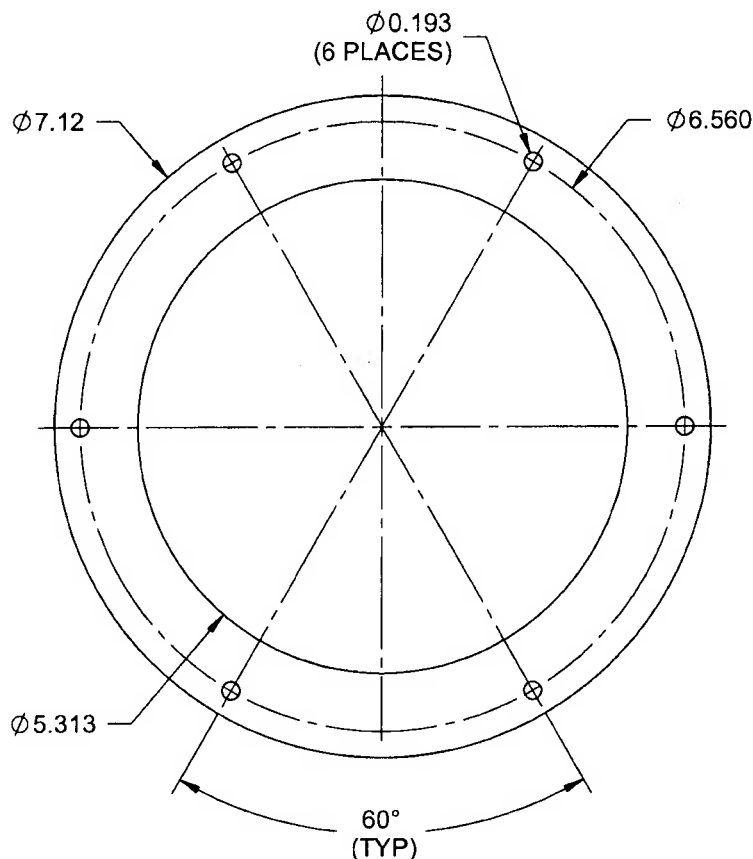
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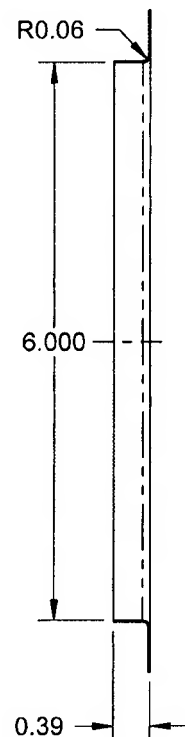


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CHECKED <i>HA</i>	APPROVED <i>HA</i>	DRAWING NO. D3473	REV. B SHEET 7 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER SCALE 1:2	

RELEASED  
*06.05.16*



**D3473-9F FLANGE FLAT PATTERN**



**D3473-9 FLANGE  
BENDING DETAIL**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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# SPOT WELD TEST RECORD

AMS-W-6858A

CLASS 'C'

TEST NO#: 23

EMPLOYEE: Melanie Fauteux

PART NUMBER: D3473-5

JOB NUMBER: B 34420

MATERIAL TYPE: 304L

MATERIAL THICKNESS: 0.08

GROUP SPECIFICATION

☐

Group 1: Aluminum & magnesium

☐

Group 2: Iron; nickel; cobalt

☒

Group 3: Titanium

## TEST RESULTS

	PASS	FAIL
VISUAL:	[ <u>/</u> ]	[ ]
PENETRATION:	[ <u>/</u> ]	[ ]
PULL STRENGTH:	[ ]	[ ] PSI Reading: _____

Qualified in accordance with standard AMS-W-6858A and QSI 004 (ref: 4.3)

DATE OF TEST COUPON: 07/01/16  
QUALIFIER: SB